

1/15

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicants:

Garner T. Haupert, Jr. and Steven R. Gullans

Application No.: 10/601,184 Group Art Unit: 1644

Filed: June 20, 2003 Examiner: Not yet assigned

Confirmation No.: 6779

Title: BIOSYNTHESIS OF HIF

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:

December 20, 2004

Date

Signature

Meredith Murray

Typed or printed name of person signing certificate

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)

under 37 CFR 1.97(b), or

(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

under 37 CFR 1.97(c) together with either:

a Statement under 37 CFR 1.97(e), as checked below, or

a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

under 37 CFR 1.97(d) together with:

a Statement under 37 CFR 1.97(e), as checked below, and

a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Enclosed herewith is form PTO-1449:

- Copies of the cited references are enclosed (AA-AH, AL-AQ, AL2-AN2, AR-AZ, AR2-AZ2, AR3-AZ3, AR4-AV4).
 - Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- The listed references (AA, AB, AP and AR4) were cited in the enclosed International Search Report in a counterpart foreign application.
- The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
 - the explanation provided on the attached sheet.
 - the explanation provided in the Specification.
 - submission of the enclosed International Search Report.
 - submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
 - the enclosed English language abstract.

[X] Applicant requests that the following non-published pending applications be considered:

Examiner's
Initials

____ U.S. Patent Application No. 09/220,913, by Garner T. Haupert, Jr. ,
filed December 24, 1998, Atty. Docket No.: 0838.1002-000

____ U.S. Patent Application No. 09/412,268, by Behnaz Parharmi-Seren, *et al.*,
filed October 5, 1999, Atty. Docket No.: 0838.1004-000

____ U.S. Patent Application No. 09/506,246, by Rex T. Gallagher, *et al.*,
filed February 17, 2000, Atty. Docket No.: 2075.1002-003

____ Examiner

____ Date

[X] A copy of each above-cited application, including the current claims, is enclosed.

[] A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

[] A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.

[] Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.

[X] Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
 Kraig K. Anderson
 Registration No.: 54,961
 Telephone: (978) 341-0036
 Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated:

December 20, 2004

PTO-1449 REPRODUCED U.S. INFORMATION DISCLOSURE CITATION IN AN APPLICATION DEC 27 2004 PATENT & TRADEMARK OFFICE SC161 December 20, 2004 (Use several sheets if necessary)		ATTORNEY DOCKET NO. 0838.2003-001	APPLICATION NO. 10/601,184
APPLICANT Garner T. Haupert, Jr., <i>et al.</i>			
FILING DATE June 20, 2003		CONFIRMATION NO. 6779	GROUP 1644

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF. NO.	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME
	AA	6,265,383 B1	July 24, 2001	Haupert, Jr.
	AB	6,274,558 B1	August 14, 2001	Haupert, Jr.
	AC	5,716,937	February 10, 1998	Haupert, Jr.
	AD	5,910,484	June 8, 1999	Haupert, Jr.
	AE	US 2004 - 0248080 A1	December 9, 2004	Haupert, Jr.
	AF	5,844,091	December 1, 1998	Blaustein, <i>et al.</i>
	AG	5,695,756	December 9, 1997	Blaustein, <i>et al.</i>
	AH	5,164,296	November 17, 1992	Blaustein, <i>et al.</i>
	AI			
	AJ			
	AK			
	AA2			
	AB2			
	AC2			
	AD2			
	AE2			
	AF2			
	AG2			
	AH2			
	AI2			
	AJ2			
	AK2			
	AA3			
	AB3			
	AC3			

EXAMINER	DATE CONSIDERED
----------	-----------------

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION December 20, 2004 (Use several sheets if necessary)		ATTORNEY DOCKET NO. 0838.2003-001	APPLICATION NO. 10/601,184
		APPLICANT Garner T. Haupert, Jr., <i>et al.</i>	
		FILING DATE June 20, 2003	CONFIRMATION NO. 6779
			GROUP 1644

FOREIGN PATENT DOCUMENTS					
		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO
	AL	WO 98/53832 A1	12/03/1998	The General Hospital Corporation	
	AM	WO 98/54195 A1	12/03/1998	The General Hospital Corporation, <i>et al.</i>	
	AN	WO 98/07739 A1	02/26/1998	The General Hospital Corporation, <i>et al.</i>	
	AO	WO 98/53831 A1	12/03/1998	The General Hospital Corporation	
	AP	WO 00/39328 A1	07/06/2000	The General Hospital Corporation	
	AQ	WO 01/25281 A1	04/12/2001	The General Hospital Corporation	
	AL2	WO 2004/000328 A1	12/31/2003	The General Hospital Corporation, <i>et al.</i>	
	AM2	EP 0 983 071 B1	03/08/2000	The General Hospital Corporation	
	AN2	EP 0 433 074 B1	06/19/1991	The General Hospital Corporation	
	AO2				
	AP2				
	AQ2				
	AL3				
	AM3				
	AN3				
	AO3				
	AP3				
	AQ3				
	AL4				
	AM4				
	AN4				
	AO4				
	AP4				
	AQ4				

EXAMINER	DATE CONSIDERED
----------	-----------------

PTO-1449 REPRODUCED	ATTORNEY DOCKET NO. 0838.2003-001	APPLICATION NO. 10/601,184
INFORMATION DISCLOSURE CITATION IN AN APPLICATION December 20, 2004 (Use several sheets if necessary)	APPLICANT Garner T. Haupert, Jr., <i>et al.</i>	
	FILING DATE June 20, 2003	CONFIRMATION NO. 6779
		GROUP 1644

OTHER DOCUMENTS (<i>Including Author, Title, Date, Pertinent Pages, Etc.</i>)		
AR	Bennett, R.D., <i>et al.</i> , "Progesterone Metabolism in <i>Digitalis Lanata</i> ", <i>Phytochemistry</i> 7: 41-50 (1968).	
AS	Blaustein, M. P., "Sodium Ions, Calcium Ions, Blood Pressure Regulation, and Hypertension: A Reassessment and a Hypothesis", <i>Am. J. Physiol.</i> , 232(5): C165-C173 (1977).	
AT	Blaustein, M.P., "Endogenous Ouabain: Role in the Pathogenesis of Hypertension", <i>Kidney Int.</i> 49(6): 1748-1753 (1996).	
AU	Cantiello, <i>et al.</i> , "Na ⁺ Pump in Renal Tubular Cells is Regulated by Endogenous Na ⁺ , K ⁺ - ATPase Inhibitor from Hypothalamus", <i>Am. J. Physiol.</i> , 255: F574-580 (1988).	
AV	Capsi, E. and Lewis, D.O., "Progesterone: Its Possible Role in the Biosynthesis of Cardenolides in <i>Digitalis Lanata</i> ", <i>Science</i> 156(3774): 519-520 (1967).	
AW	Carilli, C. T., <i>et al.</i> , "Hypothalamic Factor Inhibits the (Na,K) ATPase from the Extracellular Surface", <i>The Journal of Biological Chemistry</i> , 260(2): 1027-1031 (1985).	
AY	Crabos, M, <i>et al.</i> , "Atrial Natriuretic Peptide Regulates Release of Na ⁺ -K ⁺ -ATPase Inhibitor from Rat Brain", <i>Am. J. Physiol.</i> , 254(6): F912-F917 (1988).	
AY	DeAngelis, C. and Haupert, Jr., G. T., "Hypoxia Triggers Release of an Endogenous Inhibitor of Na ⁺ , -K ⁺ -ATPase from Midbrain and Adrenal", <i>Am. J. Physiol.</i> , 274(1): F182-F188 (1998).	
AZ	Ferrandi, M., <i>et al.</i> , "Age-Dependency and Dietary Influence on the Hypothalamic Ouabain-Like Factor in Milan Hypertensive Rats", <i>Journal of Hypertension</i> , 13(12): 1571-1574 (1995).	
AR2	Ferrandi, M. and Bianchi, G., "Genetic Mechanisms Underlying the Regulation of Urinary Sodium Excretion and Arterial Blood Pressure: The Role of Adducin", <i>Acta. Physiol. Scand.</i> 168: 187-193 (2000).	
AS2	Ferrandi, M. and Manuta, P., "Ouabain-Like Factor: Is it the Natriuretic Hormone?", <i>Curr. Opin. Nephrol. Hypertens.</i> 9(2): 165-171 (2000).	
AT2	Ferrandi, M., <i>et al.</i> , "Ouabain-Like Factor Quantification in Mammalian Tissues and Plasma: Comparison of Two Independent Assays", <i>Hypertension</i> 30(4): 886-896 (1997).	
AU2	Goto, A., <i>et al.</i> , "Physiology and Pharmacology of Endogenous Digitalis-Like Factors", <i>Pharmacological Reviews</i> , 44(3): 377-399 (1992).	

EXAMINER	DATE CONSIDERED
----------	-----------------

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION December 20, 2004 (Use several sheets if necessary)		ATTORNEY DOCKET NO. 0838.2003-001	APPLICATION NO. 10/601,184
		APPLICANT Garner T. Haupert, Jr., <i>et al.</i>	
		FILING DATE June 20, 2003	CONFIRMATION NO. 6779
		GROUP 1644	

OTHER DOCUMENTS (<i>Including Author, Title, Date, Pertinent Pages, Etc.</i>)		
AV2	Haber, E. and Haupert, Jr., G. T., "The Search for a Hypothalamic Na ⁺ , K ⁺ -ATPase Inhibitor", <i>Hypertension</i> , 9(4): 315-324 (1987).	
AW2	Haddy, F. J. and Overbeck, H. W., "The Role of Humoral Agents in Volume Expanded Hypertension", <i>Life Sciences</i> , 19(7): 935-948 (1976).	
AX2	Hallaq, H.A. and Haupert, G.T., Jr., "Positive Inotropic Effects of the Endogenous Na ⁺ /K ⁺ - Transporting ATPase Inhibitor from the Hypothalamus", <i>Proc. Natl. Acad. Sci. USA</i> , 86(24): 10080-10084 (1989).	
AY2	Haupert, Jr., G. and Sancho, J. M., "Sodium Transport Inhibitor from Bovine Hypothalamus", <i>Proc. Natl. Acad. Sci.</i> , 76(9): 4658-4660 (1979).	
AZ2	Haupert, Jr., G. T., <i>et al.</i> , "Hypothalamic Sodium-Transport Inhibitor is a High-Affinity Reversible Inhibitor of Na ⁺ -K ⁺ -ATPase", <i>American Journal of Physiology</i> , 247(6): F919-924 (1984).	
AR3	Janssens, S. P., <i>et al.</i> , "Hypothalamic Na ⁺ , K ⁺ -ATPase Inhibitor Constricts Pulmonary Arteries of Spontaneously Hypertensive Rats", <i>Journal of Cardiovascular Pharmacology</i> , 22(Suppl. 2): S42-S46 (1993).	
AS3	Kawamura, A., <i>et al.</i> , "On the Structure of Endogenous Ouabain", <i>Proc. Natl. Acad. Sci.</i> , 96: 6654-6659 (1999).	
AT3	Kitano, S., <i>et al.</i> , "Exogenous Ouabain is Accumulated in the Adrenals and Mimics the Kinetics of Endogenous Digitalis-Like Factor in Rats", <i>Hypertens Res</i> , 21(1) : 47-56 (1998).	
AU3	Komiyama, Y., <i>et al.</i> , "Identification of Endogenous Ouabain in Culture Supernatant of PC12 Cells", <i>Journal of Hypertension</i> , 19(2): 229-236 (2001).	
AV3	Laredo, J., <i>et al.</i> , "Angiotensin II Stimulates Secretion of Endogenous Ouabain from Bovine Adrenocortical Cells via Angiotensin Type 2 Receptors", <i>Hypertension</i> , 29(1): 401-407 (1997).	
AW3	Lichtstein, D., <i>et al.</i> , "Biosynthesis of Digitalis-Like Compounds in Rat Adrenal Cells: Hydroxycholesterol as Possible Precursor", <i>Life Sciences</i> , 62(23): 2109-2126 (1998).	
AX3	Lu, Z., <i>et al.</i> , "Biosynthesis of Endogenous Ouabain from Pregnenolone and Progesterone in Bovine Adrenal Cortical Cells", <i>Hypertension</i> , 32(3): 624 (1998).	

EXAMINER	DATE CONSIDERED
----------	-----------------

PTO-1449 REPRODUCED	ATTORNEY DOCKET NO. 0838.2003-001	APPLICATION NO. 10/601,184
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		
December 20, 2004 (Use several sheets if necessary)	APPLICANT Garner T. Haupert, Jr., <i>et al.</i>	
	FILING DATE June 20, 2003	CONFIRMATION NO. 6779
		GROUP 1644

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AY3	Orth, D. N. and Kovacs, W. J., "The Adrenal Cortex". In <i>Williams Textbook of Endocrinology</i> 9th Edition, Jean. D. Wilson, M.D., <i>et al.</i> , eds. (W. B. Saunders Company), pp. 517-664 (1998).	
AZ3	Perrin, A., <i>et al.</i> , "Bovine Adrenocortical Cells in Culture Synthesize an Ouabain-Like Compound", <i>Molecular and Cellular Endocrinology</i> , 126: 7-15 (1997).	
AR4	Quazzaz, H. M. A. M., <i>et al.</i> , "Deglycosylated Products of Endogenous Digoxin-Like Immunoreactive Factor in Mammalian Tissue", <i>The Journal of Biological Chemistry</i> , 271(15): 8731-8737 (1996).	
AS4	Robel, P. and Baulier, E., "Neurosteroids: Biosynthesis and Function", <i>Neurobiology</i> , 9(4): 383-394 (1995).	
AT4	Tamura, M., <i>et al.</i> , "Identification of Two Cardiac Glycosides as Na ⁺ - Pump Inhibitors in Rat Urine and Diet", <i>The Journal of Biological Chemistry</i> , 269(16): 11972-11979 (1994).	
AU4	Tymiak, A. A. , <i>et al.</i> , "Physicochemical Characterization of a Ouabain Isomer Isolated from Bovine Hypothalamus", <i>Proc. Natl. Acad. Sci.</i> , 90: 8189-8193 (1993).	
AV4	Elbashir, S.M., <i>et al.</i> , "Duplexes of 21-Nucleotide RNAs Mediate RNA Interference in Cultured Mammalian Cells," <i>Nature</i> , 411: 494-498 (2001).	

EXAMINER	DATE CONSIDERED
----------	-----------------